

COAL MINING

Glossary

Acid mine water	water that drains from a coal mine; water that contains sulfuric acid, mainly due to the weathering of iron pyrites
Anthracite	a coal having high carbon content and low volatile matter that burns with a clean flame; also called "hard coal"
Auger	a rotary drill that uses a screw device to penetrate, break, and then transport the drilled material such as coal
Auger bit	a tool used to drill a hole in the coal seam into which the black powder charge was placed for "shooting the face"
Battery lamp	a device that operated on batteries carried on the miner's belt; replaced the carbide lamp in the 1930s
Bed	A layer of coal or other sedimentary deposit
Beehive coke oven	a dome-shaped oven lined with firebrick where coal was burned to make coke
Belt conveyor	a looped belt on which coal or other materials can be carried out of the mine
Bituminous coal	a middle rank or type of coal formed by additional pressure and heat on lignite; often referred to as soft coal
Black damp	a term generally applied to a buildup of carbon dioxide and nitrogen in the air within a mine shaft
Bug dust shovel	a long handle shovel used to clear the coal or bug dust from the undercut face so the coal could fall and break apart when "shot"
Breast plate	a plate placed against the miner's chest to help put extra pressure against the auger bit as it bore into coal



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Checks	metal coin-like disc stamped with a miner's name and/or company number to identify the coal loaded by each miner
Coal	a solid formed from organic materials and classified as a fossil fuel
Coal mine	an area of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, tunnels, excavation, and other property placed upon, under, or above the surface to be used in the extraction of coal
Coal seam	a layer of coal between layers of sandstone or shale
Coke	a solid, dry carbon residue produced by burning coal until the impurities are consumed
Continuous miner	a machine that constantly extracts and loads coal
Carbide lamp	a device attached to the miner's cap that burns a gas produced when carbide and water are mixed together
Company store	a building owned by the mining company that supplied food, furniture, equipment, and supplies to the miners and their families
Crosscut	a passageway driven between the entry and its parallel air course or air courses for ventilation purposes
Dinner bucket	a container divided into sections for water and food and used by the miner to carry food into the mine
Drift mine	an underground coal mine in which the entry or access is located on the slope of a hill and driven horizontally into a coal seam
Dust-free respirator	a mask to filter out harmful coal and rock dust
Erosion	the process of moving rock, dirt, and sediments from one place to another
Extraction	the process of removing coal from a mine



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Face	the exposed area of a coal bed from which coal is being extracted
Fire boss	the employee who entered the mine before the miners to burn off any harmful gases
Fire damp	the combustible gas methane
Fossil	an impression, cast, track, or body part of any plant or animal that is preserved in rock
Geologist	one who studies the constitution, structure, and history of the earth's crust
Hardshell cap	a hard hat that came into widespread use in the 1950s and provided more protection for the miner
Haulage	an incline rail car used for transporting coal, supplies, and people to and from the mine entrance
Headhouse	a building located near the mine opening where coal is loaded onto a conveyor or monitor to be transported to the tippie
Jenny Lind house	usually a three room, L-shaped house with board and batten exterior and no insulation constructed by the coal company and rented to the miners
Kettle bottom	a smooth cylindrical rock, thought to be the remains of a tree stump, that may drop from the roof of a mine without warning
Lamp	a device worn on a miner's cap to generate light and provide visibility in the dark coal mines
Lignite	a type of coal that has a low heat content and is formed from peat
Limestone	a sedimentary rock composed primarily of calcium carbonate
Lithification	the processes that convert a sediment into a sedimentary rock



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Longwall mining	one of three major underground coal mining methods currently in use; employs a steel plow, or rotation drum, which is pulled mechanically back and forth across a face of coal that is usually several hundred feet long; the loosened coal falls onto a conveyor for removal from the mine.
Miner	one who is engaged in the business or occupation of extracting ore, coal, precious substances, or other natural materials from the earth
Mining car	a conveyance used in the early days of mining in which coal was loaded and pulled out of the mine by animals and later by electrical power
MSHA	Mine Safety and Health Administration, the federal agency that regulates coal mine health and safety
Monitor	a system used to haul coal from the headhouse to the tippie
Overburden	layers of soil and rock covering a coal seam
Peat	the partially decayed plant matter found in swamps and bogs that is usually brown, crumbly, lightweight, and spongy in texture; one of the earliest stages of coal formation
Pick	a tool used by the miner to undercut the coal seam before shooting
Pinning	the act of placing bolts in the roof of the mine to keep it from falling
Powerhouse	a structure located near the tippie where power was produced to supply electricity to the mining operation
Preparation plant	a place where coal is cleaned, sized, and prepared for market
Reclamation	the restoration of land and environmental values to a mine site after the coal is extracted
Roof	the layer of rock or other material above the coal seam; the overhead surface inside a coal mine



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Roof bolt	a long steel bolt driven into the roof of underground excavations to support the roof and prevent and limit the extent of roof falls
Roof support	posts, jacks, roof bolts, and beams used to support the rock overlying a coal seam in an underground mine
Sandstone	a sedimentary rock consisting of sandlike quartz sand united by a cementing material
Scrip	money (paper and metal) issued instead of cash by the coal company to pay their miners instead of cash; usually redeemed only at the company store
Sediment	large and small material carried from one place to another by wind or water and deposited on the earth's surface
Sedimentary rock	rocks formed from particles by mineral matter that leaches out of ground water
Shaft-mine	an underground mine in which the main entry or access is through a vertical opening
Shale	a sedimentary rock formed by consolidation of clay, mud, or silt layers
Shooting the face	a method where the miner, after undercutting the coal, used blasting powder to break the coal loose so it could be loaded into cars
Slope mine	an underground mine with an opening that tilts upward or downward to the coal seam
Smokeless coal	the name given to high quality bituminous coal of the New River area because it contains very few impurities
Soft cap	a hat worn by miners until the late 1930s to hold the important carbide lamp
Squib	a thin roll of waxed paper with a little powder in its upper part which was inserted into the drilled hole to act as a fuse



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Surface mine	a mine where coal lies near the surface and can be extracted by removing the covering layers of rock and soil
Tamping bar	a long metal bar used to clean out the hole drilled with the auger bit and to tamp the blasting powder back into the hole
Tipple	originally the place where the mine cars were tipped and emptied of their coal; a place still used in that same sense, although now more generally applied to the surface structures of a mine, including the preparation plant and loading tracks
Undercutting	an early method of mining coal where a layer of coal was removed with a pick at the bottom of the seam
Underground mine	a deep mine usually located several hundred feet below the earth's surface where coal is removed mechanically and transferred by shuttle car or conveyor to the surface
Weighman	the employee who weighed the mine cars as they came out of the mine and credited the tonnage to the appropriate miner

